markings. And it is quite possible that the shadow has been observed on more than one occasion, but mistaken for an ordinary spot on the surface of Jupiter.

A curious fact in connection with the new satellite is its diminutive size as compared with the four others discovered by Galileo in 1610. But there is a similar disparity in the dimensions of the satellites of Saturn, and in proof of this we have only to compare the bright *Titan* with the excessively faint *Mimas* and *Hyperion.* Small as it is, however, it is certain that this new satellite of Jupiter is much larger than either of the two abnormally minute moons of Mars.

American astronomers are to be congratulated on this important discovery. Scientific activity in the United States has been rapidly developing in recent years, and this has been strikingly exemplified in the wide and attractive domain of astronomy. W. F. DENNING.

NOTES.

THE French Association for the Advancement of Science is holding at Pau its twenty-first annual meeting. The meeting began on Saturday last, when the members of the Association were cordially welcomed to Pau by the Mayor. The President, M. Collignon, delivered an address on the science and art of the engineer.

THE autumn meetings of the Iron and Steel Institute, under the presidency of Sir Frederick Abel, began at St. George's Hall, Liverpool, on Tuesday. At the opening meeting the President announced that the Council had elected Mr. Windsor Richards as his successor.

WE are glad to announce that a new Biological Laboratory is about to be established in the Calcutta Zoological Gardens. Babu Joy Gobinda Law, a member of one of the wealthy native families of Bengal, has offered R. 15,000 for the buildings and fittings of this institution. The primary object for which the Laboratory is founded is to investigate the action of snake-poison, and to discover, if possible, an antidote. The Laboratory will, however, also be used for anatomical and pathological researches, for which the rich material afforded by the animals in the gardens will be available.

THE Marine Biological Laboratory at Wood Hole, U.S., has been more successful this summer than in any previous year. During its season of work it had a corps of seventeen officers, instructors, and assistants, and an attendance of thirty-eight investigators and sixty-two elementary students.

WITH the designation of the Hopkins Seaside Laboratory, a marine biological laboratory has been established at Pacific Grove, California. We learn from the *Botanical Gazette* that, through the generosity of the Pacific Improvement Company, a piece of land has been furnished, and a sum granted sufficient to erect a plain frame building; and, by the liberality of Mr. Timothy Hopkins, provision is made for the equipment of the building, and for the further continuation and extension of the enterprise. An elementary course of lectures on marine botany was to be given during the present season.

THE weather during the past week was very fine and bright over the southern and eastern portions of the United Kingdom, until near the close of the period, when the type entirely changed, and thunderstorms, accompanied by heavy rain, occurred generally, but in the north and west the conditions were throughout far less settled. Cyclonic disturbances arrived on our coasts from the Atlantic with considerable frequency, and although they were for the most part slight and shallow, and unaccompanied by much wind, they were productive of a considerable quantity of rain. An important disturbance passed to the north of Scotland on Thursday night and during Friday, and was accompanied by strong gales on our north-west and north coasts. Temperatures were high for the season over the greater part of England, and on Monday the day readings in places were higher than at any time during the month, the shade thermometer registering 72° in London. Some nights, however, were exceptionally cold, the shade minimum between Saturday and Sunday falling to within one degree of the freezing point in the eastern part of England, while there was a sharp frost on the ground open to the sky. The *Weekly Weather Report*, issued on the 17th inst., shows that the rainfall exceeded the mean in the north and west of Scotland and in the north of Ireland. In all the other parts of the United Kingdom there was a deficit; in most of the English districts the fall was very slight.

THE Report of the Meteorological Commission for the year 1891 states that complete, or nearly complete, meteorological observations have been received from forty-nine stations, and that observations of rainfall have been furnished from 320 stations; the instruments are usually supplied by the Commission. The Report contains diagrams showing the mean monthly rainfall corrected to date at thirty-three stations, together with the abnormal falls in the years 1888 and 1891. The rainfall in 1891 has been excessive, especially over the eastern part of the colony and over the Orange Free State, where at some places it exceeded 12 inches above the average. The observer at Phillipolis states that hardly a farmer in that district but has lost one-third of his sheep, owing to the continued wet, and in some places the farmers have had to vacate their homes in consequence of the weather.

THE "Pilot Chart of the North Atlantic Ocean" for September contains tracks of the drift of the two parts of the derelict ship *Fred. B. Taylor*, which was cut in two by a collision on June 22, in lat. 40° 19′ N., long. 68° 33′ W. The forward and after parts separated, and drifted in entirely different directions, in a manner which is quite unprecedented in the history of shipwrecks. The after end was evidently influenced more by wind than the bow portion; the latter pursued a south-westerly course, which was attributable largely to the cold southerly current between the American coast and the Gulf Stream, and on August 26 had drifted to lat. 38° 40′, long. 73° 15′. The stern part took a direct northerly course until July 17, when it was ten miles north-west of Matinicus Island, whence it took a westerly course, and was cast ashore on August 7 on Wells Beach, near Cape Porpoise.

THE first annual convention of the American Association of State Weather Services was held at Rochester, N.Y., on August 15 and 16, in conjunction with the meeting of the American Association for the Advancement of Science, and was largely attended by representatives of the various States. The subject of thermometer exposure was discussed, and a committee was appointed to consider the most suitable form of shelter and manner of exposure to be adopted throughout the country. It was resolved that means should be deduced from self-registering instruments wherever practicable, in preference to the method of using eye observations. An interesting paper was read by W. L. Moore, of Wisconsin, on the forecasting of thunderstorms; and the question of the best methods of signalling weather forecasts, whether by flags, semaphores, spherical bodies hoisted on a staff, &c., was freely discussed, and a committee was appointed to report upon the subject at an early date. It was decided that each State service should have a separate exhibit at the World's Fair at Chicago, and not to have the exhibits collected in the building for the use of the United States Weather Bureau.

LAST year an Aino in the western part of the island of Yezo caught two bears, one of which was perfectly white. This capture created much excitement among the natives, as their chief god is a white bear, and he is supposed to dwell on an inaccessible mountain in the interior of the island, and never to let himself be seen by human beings. The Ainos, therefore, concluded that the young white bear was a sort of Messiah, and after long consideration they decided that he ought to be sent as a present to the Mikado. In due time he arrived at Tokio, and by the Mikado's orders he was received into the Zoological Garden. Here the animal soon became ill, and Herr J. L. Janson was requested to do what he could for it. Fortunately his treatment of it was successful. At first he thought the creature must be a polar bear; but he soon convinced himself that this was a mistake, and that it was in reality an albino. In the latest number of the "Mittheilungen der Deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens in Tokio," Herr Janson gives a full account of the bear, and he adds some interesting facts as to the importance attributed to white animals generally, and especially to albinos, in Japan. The appearance of an albino is supposed to be a good omen for the reigning monarch. The reign of a sovereign may even be known by the name of a white animal. Thus the reign of one ancient Mikado is called "Hakuchi nenkan," the period of the white pheasant. That of another is "Haku hōō nenkan," the period of the white phœnix. The white fox is often mentioned in fables and temple-stories, and a white serpent always appears in pictures and plastic representations with Benten, the goddess of fortune. As in former times among the Greeks, Romans, Persians, and Scythians, so among the Japanese, horses dedicated to the gods were generally white; and white horses are still found in connection with all the larger temples, and take part in the great annual processions. The milk and butter derived from white cows were formerly held in high esteem as medicine.

Mr. F. W. Ward, formerly editor of the *Sydney Daily Telegraph*, has sent to the Agricultural Department of New South Wales a report on recent shipments of fruit from Cape Colony to London. The report is printed in the July number of the *Agricultural Gazette of New South Wales*, which recommends it as "worthy of careful perusal." The *Gazette* refers to the fact that good fruit-growing districts abound in Australia, and that no better fruit can be grown in South Africa than is now being produced in many districts of New South Wales. The chief mistake hitherto, it says, has been the growing of unsuitable varieties—unsuitable not alone for export, but even for ordinary home use. It adds that this defect is being rapidly remedied, and that many growers, who have gained experience by their own efforts, are settling down to the work with intelligent earnestness.

Writing of wild strawberries in Ceylon, Mr. Nock says in the *Ceylon Observer* that the species *Fragaria vesca*, which grows so luxuriantly and fruits so abundantly in Jamaica, is now growing wild in many places in the Nuwara Eliya district. If the soil in Ceylon were as good as it is in the Blue Mountains of Jamaica, and there was less Nilu (*Strobilanthes*), this strawberry would soon, he thinks, be as plentiful in the hill districts of Ceylon as it is there. When Mr. Nock was Superintendent of the Government Cinchona Plantation in Jamaica, he has given as many as twenty free tickets in one day to old women and children to gather strawberries among the Cinchona Plantations. He has known them gathered by the bushel, and carried twenty-two miles to the Kingston market, where they always commanded a good price. He adds that he has this year raised seedlings of six of the best English varieties, to which he intends to give a fair trial in the Nuwara Eliya district.

The University of Minnesota has begun the publication of a *Quarterly Bulletin*, under the management of a board of editors. The chief editor being Prof. Conway M'Millan, the professor of botany to the University, is a guarantee that the interests of science will not be neglected in the *Bulletin*; and the first number contains several items of information of interest to American botanists.

In the report of the Royal Botanic Garden, Calcutta, for the year 1891–92, it is shown that the year was one of great activity as regards outdoor operations. The abnormally dry season proved very trying to many exotics, and, though for a time all other work was suspended and the whole garden staff was employed only in watering plants, many casualties occurred, especially among the finer and rarer plants. The attention of the staff was as usual largely directed to the cultivation and distribution of plants of economic interest. The chief event of the year under this head was the introduction of the aloe, which yields "sisal hemp" (*Agave rigida*, var. *sisalana*). The Director of the Royal Gardens, Kew, in June 1891, kindly obtained a consignment of plants for the Calcutta Garden from Florida, and kept these at Kew till they were strong enough to stand the voyage to Calcutta. The boxes reached Calcutta on October 29, 1891; unfortunately a considerable percentage of the plants died on the way out, and it was necessary to nurse the survivors carefully before they could be distributed. Over 19,000 specimens were contributed to the Herbarium during the year from various sources; while the distribution of authentically-named specimens to other herbaria reached the high total of 10,505 sheets. The chief benefactor to the Calcutta Herbarium was again the Royal Herbarium, Kew, to the Director of which institution the Calcutta one "owes a debt that can never be repaid." Among other contributors was Baron von Mueller, who again sent a beautiful collection of Australian plants. The Herbarium was also greatly enriched by further accessions of Tibetan, Chinese, and Mexican specimens, and the Saharanpur Herbarium presented 954 plants from the north-west Himalaya. Dr. Prain visited the Andaman Islands, Mount Parashak, and the Khasia, and was thus enabled to add valuable collections. Much good work was also done by collectors employed by the Calcutta Garden.

In the second number of the *Journal of the Polynesian Society* Dr. A. Carroll, of Sydney, offers what he believes to be translations of some of the famous Easter Island inscriptions. He is of opinion that Easter Island was at one time occupied by a pre-Polynesian people from America, and that to them the inscriptions are to be attributed. "While engaged in studying the languages, histories, antiquities, and inscriptions of ancient American peoples," he says, "I came upon similarities to the Easter Island characters, &c.; with these as keys, discovered what certain groups expressed, and from these, proceeding upon the recognized methods of decipherment, succeeded in reading into the original languages, and from these translating into English these Easter Island inscriptions." This is very vague, and, until Dr. Carroll gives some more definite information as to his methods, his claim that "another ancient writing is deciphered" will seem somewhat extravagant. Among the other contents of the number are an interesting account of some stone implements from the Chatham Islands, by Mr. S. Percy Smith, and the first part of a history of the occupation of the Chatham Islands by the Maoris in 1835, by Mr. A. Shand. Mr. Shand's information has been derived from the Maoris themselves, many of those who supplied it having taken part in the transactions they described.

Mr. William Kent, writing in *Science* on the American Association for the Advancement of Science, complains that it does not adequately represent the scientific movement in the United States. He points out that while more than 2000 members attended the Edinburgh meeting of the British Association, there were not 500 members at the Rochester meeting of the American Association, and of this number New York State contributed far more than its quota. In proportion to its population, Ohio sent twice as many members as Pennsylvania, although its average distance from Rochester is greater. Moreover, the several branches of science are not equally represented. Mechanical and engineering science, which is developing in the country by leaps and bounds, sends to the Association only one-fourth as many members as chemistry, and one-eighth as many as biology. The physical sciences, Mr. Kent says, are "dwarfed by the natural sciences." This he attributes to the fact that those who devote themselves to applied science have so many societies of their own that they are diverted from and lose their interest in the American Association. In engineering there are four large national societies, the civil, the mechanical, the mining, and the electrical, besides numerous local societies, aggregating a membership of probably 5000 persons, not counting duplications of those who belong to two or more societies.

A MOVEMENT has been started in Melbourne for the passing of a law which may tend to prevent the wanton destruction of birds in Victoria. A deputation, organized by the Victoria Field Naturalists' Club and representing the Melbourne Royal Society, Royal Agricultural Society, Royal Horticultural Society, and Zoological and Acclimatization Society lately brought the subject under the notice of the Ministers of Customs. In introducing the deputation, Messrs. G. D. Carter and J. Bosisto dwelt upon the necessity of protecting insectivorous birds from the reckless and indiscriminate shooting which is now so prevalent, as well as human lives, which are frequently sacrificed to the inexperience of sportsmen. The imposition of a gun tax as a legitimate source of revenue was also suggested. Prof. Kernot (Royal Society), Mr. C. M. Officer (Zoological Society), and Mr. C. Draper (Royal Agricultural Society) also emphasized these views. Mr. F. Wisewould referred to the draft which had been drawn up by the sub-committee of the Field Naturalists' Club—a draft based upon similar Acts in England and some of the Australian colonies. A few new features had, however, been added, notably that which made it illegal for persons under the influence of liquor to carry firearms. It was also provided that under no circumstances should a licence be given for the use of swivel guns. In answer to the deputation the Minister said that he would take the draft bill which had been prepared into favourable consideration. He would have an amended draft drawn up and submitted to those interested before its introduction into Parliament. He was of opinion that a 5*s*. tax, as proposed, was not heavy enough, since it would be worth the while of those who let out guns to pay the tax themselves.

THE serum of blood used to be regarded as merely a nutritive liquid; but it has been found to play a more important part, being capable of killing disease-germs, and of destroying and dissolving the red blood corpuscles of other animals. These properties have been recently studied by Herr Buchner (*Münchener Med. Wochenschrift*). They are gradually lost when the liquid has been removed from the animal. They are also destroyed by heating half-an-hour to 52° to 55° C. (A dog's serum stops the amœba-like movements of white-corpuscles of another animal species without killing them: but this property is also lost by heating to 55°.) Light also stops both actions; and diffuse daylight more than direct sunlight. It is apparently albumens in the serum that are operative; but whether all the albuminoid constituents, or certain specific albumens, was not determined. It is remarkable that solution of the serum with a 0·7 per cent. solution of common salt does not spoil the action, whereas a similar dilution with pure water makes the serum nearly inactive. But serum thus made inactive with water recovers its properties if salt solution is added; and this is the case even when the serum has been kept in the active state for four to 24 hours in ice. Serum may also receive a 0·7 per cent. solution of potassium or lithium chloride, or various other salts of the fixed alkalis, without losing its germicide properties. Ammonium salts even stimulate the latter. Herr Buchner calls the albumens in question alexines (or protective matters); he supposes they have a like action on foreign cells generally. The serum of dogs and rabbits having been mixed, the power of both alexines was weakened, but those of the rabbit more than those of the dog (to typhus bacilli). After acting some time on each other the globulicide power was quite extinguished. The author finds in these facts an explanation of the antitoxical action of the serum of animals protected against disease.

ACCORDING to the *Revista Financiera Mexicana*, quoted in the current number of the *Board of Trade Journal*, a deposit of onyx of considerable importance has just been discovered in Mexico, about 50 kilometres south of El Paso. It is said to be of superior quality, with fine grain, and richly shaded with delicate and varied tints. Blocks of considerable dimensions can be easily extracted.

DR. MORRIS GIBBS writes to *Science* from Kalamazoo, Michigan, that in that State there are to his knowledge six species of birds which feed on acorns. Of these, the passenger-pigeon and mourning-dove swallow the acorn entire, with its shell intact, only removing the cup or rough outside covering. The white-bellied nut-hatch occasionally hoards the acorns away, and only draws on its store after some months, and when the firm shelly covering readily gives way to its sharp, prying bill. The other three are the well-known blue-jay, common crow-blackbird, and red-headed woodpecker. So far as he has been able to learn, these birds, except in rare instances, do not pick the acorns from the tree, but have to content themselves with the fallen fruit. The red-head, deigning to descend to the ground, seizes an acorn, and flying with it in its bill to a spot where there is a small cavity in the dead portion of a trunk, or to a crevice in the bark, immediately begins to hammer it with its sharp-pointed bill. In a couple of strokes, it has removed the outer shell or cup, and at once attacks the still green-coloured shell which directly surrounds the meat. The inside, or shell proper, quickly gives way, usually nearly in halves, and the woodpecker enjoys the kernel. The woodpeckers are as nearly strict insect-feeders as any birds in Michigan, unless an exception is made of the swifts and swallows, yet here is an instance of a varied diet. However, the red-head is quickly satisfied in the acorn line, and soon begins circling the trunk, or more often limbs, for his legitimate food. The blackbird confines himself to the ground in his efforts for acorn meats. Walking up sedately to an acorn, and making no effort to seize or confine it, it strikes savagely and almost aimlessly. Its bill frequently glances, and the splintered shell dances about, until at last a huge piece of the kernel is dragged out, after which the bird leaves for other quarters or begins on another acorn. The jay swoops down with flaunting blue wings, and, seizing the largest acorn on the ground, flies to the nearest convenient limb or to the decayed ridge-board of an adjacent building. There, firmly pressing the nut between his big, black feet, he hammers away with a vengeance, and quickly tears off nearly half of the shell, after which he proceeds to pick out the meat in small bits. The cup is often left nearly perfect, the jay never making an effort to secure the nut entire, which he could easily do. Walking under the oaks, one can readily tell whether the woodpeckers, blackbirds, or jays have been at work among the acorns, by the appearance of the mutilated shell-remains lying about.

THE following arrangements have been made for science lectures at the Royal Victoria Hall during October:—October 4, Sir John Lubbock on "Books." After the address he will present the prizes and certificates gained by students of the M. M. College, Prof. Foxwell in the chair. October 11, Mr. C. T. Dent (late President of the Alpine Club), on "The Alps in Winter." October 18, Mr. F. W. Rudler, on "Frost and Fire," with special reference to the flood at St. Gervais, and the eruption of Etna. October 25, Col. Swinhoe on "Some Curiosities in Nature."

LAST week we noted that Messrs. Macmillan and Co. had issued a new edition of "Arithmetic for Schools." This is the well-known work by Mr. Barnard Smith. The book has been revised and enlarged by Prof. W. H. H. Hudson.

MESSRS. GAUTHIER-VILLARS have issued "Bulles de Savon," a translation, by C. E. Guillaume, of Mr. Boys' little work on "Soap Bubbles." The translator, while reproducing the main features of the book, has, with the author's sanction, adapted it for the use of French readers. He has also incorporated an account of some new experiments which Mr. Boys has brought to his notice.

THE first number of a new German journal, which promises to be of considerable interest to non-professional students of science, has just been issued in Berlin, the publisher being R. Oppenheim. It is entitled *Natur und Haus*, and is edited by L. Staby and M. Hesdorffer. The articles are written in a popular style, and well illustrated.

THE additions to the Zoological Society's Gardens during the past week include a Mona Monkey (*Cercopithecus mona* ♀) from West Africa, presented by Col. Makins; a Macaque Monkey (*Macacus cynomolgus* ♂) from India, presented by Mrs. Palmer; a Vulpine Squirrel (*Sciurus vulpina* ♂) from North America, presented by the Hon. G. Carew; a Malayan Tapir (*Tapirus indicus* ♂) from Malacca, presented by Col. J. M. Jenkins; a Great Eagle Owl (*Bubo maximus*), European, presented by Commander Ernest Rason, R.N.; a Black-crested Cardinal (*Gubernatrix cristatella*) from South America, presented by the Rev. W. B. K. Frances; a Small Hill Mynah (*Gracula religiosa*) from India, presented by Mr. George Grigs; a Long-nosed Crocodile (*Crocodilus cataphractus*) from the River Juba, East Africa, presented by Capt. F. G. Dunbar, R.N.; two —— Tortoises (*Testudo* ——), five Cinixys (*Cinixys* ——), a Puff Adder (*Vipera arietans*) from East Africa, presented by Mr. D. Wilson; a Pig-tailed Monkey (*Macacus nemestrinus* ♂) from Java, a White-backed Piping Crow (*Gymnorhina leuconota*) from Australia, an Adorned Terrapin (*Clemmys ornata*) from North America, a Robben Island Snake (*Coronella phocarum*) from South Africa, deposited; a Red Kangaroo (*Macropus rufus* ♀), a Black-fronted Weaver Bird (*Hypotriorchis velatus*) bred in the gardens.

OUR ASTRONOMICAL COLUMN.

PROPOSED SCHOOL OF PRACTICAL ASTRONOMY.—Mr. H. C. Russell, Government Astronomer of New South Wales, in a paper read before the Royal Society of Tasmania, makes some very practicable, and what we think excellent, suggestions with respect to the disposal of the sum of money (£10,000) left by the late Mr. Leake for the foundation of a school of astronomy. The idea is for the Leake trustees to co-operate with the University of Tasmania, and in this way form a complete school in which both the theory and practice of astronomy should be dealt with simultaneously. In addition to the observatory being merely a school for students, Mr. Russell suggests that it should take up some special line of research, and proposes that of astronomical photography. This seems an excellent proposition. The work which such an observatory as this could do if thoroughly equipped with the necessary apparatus, would be very considerable, and the special advantages of climate and position, to say nothing of the unexplored state of the southern heavens, would soon render it of great importance. There is no doubt that we are not yet overburdened with a surplus of observatories in the southern hemisphere, for even now there is a doubt as to how the international photographic chart of the heavens shall be provided for in this region, three observatories which have undertaken the work having been unable to carry out their plans on account of the political troubles. Should this proposal be accepted, the new Leake Observatory will start under good auspices, as it will fill up a gap by taking in hand a share of the greatest modern astronomical enterprise.

DOUBLE STAR MEASURES.—Mr. S. W. Burnham, in *Astronomische Nachrichten*, Nos. 3113–14, gives a list of all the double star measures that he has made during the year 1891 with the 36-inch of the Lick Observatory. Most of the stars here included may be classed as difficult objects, being too close for any smaller aperture, and all of them more or less unequal. As Mr. Burnham tells us, many of the stars are taken from his own catalogues, it being rather important to measure them at this time, since several are in very rapid motion. Owing to the fact that some of these stars have not been measured since the time of their discovery, it is interesting to note the changes that have taken place. Observations of these have "shown some very remarkable changes, and have shown the existence of some of the most remarkable binary systems known." Measurements have also been made of some of the closest and most difficult binaries from the discoveries of Clark, Struve, and others. The epoch for the star places is as heretofore 1880.

COMET BROOKS (1882, AUGUST 27).—From *Edinburgh Circular*, No. 31, we make the following extract of the elements and ephemeris relating to the comet discovered by Mr. Brooks at Geneva on the 27th. The computations are based on four observations made between August 31 and September 5:—

Elements.

T = 1892 Dec. 19·727 M.T. Berlin.

$$\left.\begin{array}{rcrrr} & & {}^{\circ} & {}' & {}'' \\ \omega & = & 269 & 24 & 27 \\ ☊ & = & 261 & 2 & 55 \\ i & = & 27 & 57 & 8 \end{array}\right\}\text{Mean Equator, 1892·0.}$$

$$\text{Log } q = 9{\cdot}84455.$$

Ephemeris for Berlin Midnight.

1892.	R.A. h. m. s.	Decl. ° ′	log. Δ.	log. *r*.	Br.
Sept. 21	7 2 13	+28 41·6	0·2342	0·2458	2·5
23	7 8 13	28 14·5			
25	7 14 21	27 45·0	0·2105	0·2315	3·0
27	7 20 37	27 13·1			
29	7 27 2	26 38·6	0·1860	0·2166	3·6

The brightness at the time of discovery is taken, as usual, as the unit of Br.

NOVA AURIGÆ.—Some short notes with regard to Nova Aurigæ are communicated to *Astronomische Nachrichten*, No. 3114, which may be of interest here:—On Sept. 3, Dr. F. Ristenpart, of the Observatory in Karlsruhe, with a 6-inch refractor, by comparing the Nova with the brightness of an accompanying star, estimates the Nova as of the 9·65 magnitude of the Bonn scale. Herr Cand. F. Kroeger observed the Nova on three different occasions—Sept. 3, 4, and 6. Comparing it with a neighbouring star of the 9·5m. (Star—Nova = $+ 3^{s}{\cdot}5 + 1'{\cdot}2$), the Nova was found to be about "a degree dimmer than the comparison star." On Sept. 4 the seeing was much better, and the Nova was about "two degrees brighter than the comparison star." On the third occasion, with excellent definition, the comparison star and the Nova were of equal brightness. These observations are all made between 12h. and 12h. 30m. Kiel mean time. Prof. E. E. Barnard has also made a very interesting observation with the 36-inch of the Lick Observatory, finding that the Nova appeared as a small, bright nebula, with a *star-like nucleus* of the 10th magnitude. The nebulosity, as he says, "was pretty, bright, and dense, and was 3″ in diameter. Surrounding this was a fainter glow, perhaps half a minute in diameter." If this observation can be verified, it will assuredly strengthen very considerably the hypothesis that the Nova was caused by collisions of meteorites, in the same way as the stars in the Pleiades nebula are the loci of intersecting streams, as clearly shown by Mr. Roberts' wonderful photographs.